UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

26753

7590

06/15/2009

ANDRUS, SCEALES, STARKE & SAWALL, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202 EXAMINER

SUCHFIELD, GEORGE A

ART UNIT PAPER NUMBER

3676

DATE MAILED: 06/15/2009

ĺ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/580,812	08/01/2007	Keith R. Minnich	4553-00025	6451

TITLE OF INVENTION: METHOD FOR PRODUCTION OF HIGH PRESSURE STEAM FROM PRODUCED WATER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/15/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Feet	s) Transmittal This	s certificate cannot be use	for domestic mailings of the d for any other accompanying ment or formal drawing, must n.
	7590 06/15/ EALES, STARKE CONSIN AVENUE, WI 53202	& SAWALL, LL		Cert	tificate of Mailing or Tra	
						(Depositor's name)
						(Signature)
	_					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	. CONFIRMATION NO.
10/580,812 TITLE OF INVENTION	08/01/2007 : METHOD FOR PROD	UCTION OF HIGH PRE	Keith R. Minnich ESSURE STEAM FROM P	RODUCED WATE	4553-00025 ER	6451
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	E FEE TOTAL FEE(S) D	UE DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	09/15/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS			
SUCHFIELD	, GEORGE A	3676	166-266000	,		
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Uni	ND RESIDENCE DATA less an assignee is identi h in 37 CFR 3.11. Comp	Indication form ed. Use of a Customer  TO BE PRINTED ON The designation of the control of the co	(1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent attolisted, no name will be THE PATENT (print or type data will appear on the part of the p	rely, e firm (having as a ggent) and the name meys or agents. If r printed.  be) atent. If an assigne assignment.	member a 2es of up to no name is 3ee is identified below, the	e document has been filed for
			-			group entity Government
	are submitted: To small entity discount p # of Copies	ermitted)	o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is attached.	deficiency, or credit any e an extra copy of this form).
• •	s SMALL ENTITY statu	s. See 37 CFR 1.27.	b. Applicant is no long	-		CFR 1.27(g)(2).
interest as shown by the	records of the United Stat	es Patent and Trademark	Office.	appirount, a regis	serve anomey or agent, 0.	i die assignee of other party in
Authorized Signature				Date		
Typed or printed name		Registration No				
an application. Confident submitting the completed this form and/or suggesti	tiality is governed by 35 d application form to the tons for reducing this bur riginia 22313-1450. DO	U.S.C. 122 and 37 CFR USPTO. Time will vary den. should be sent to th	1.14. This collection is est depending upon the indiverse Chief Information Office	imated to take 12 n idual case. Any cor r. U.S. Patent and "	ninutes to complete, inclu mments on the amount of Frademark Office, U.S. D	and by the USPTO to process) ding gathering, preparing, and time you require to complete epartment of Commerce, P.O. er for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/580,812	08/01/2007	Keith R. Minnich	4553-00025	6451	
26753 75	90 06/15/2009		EXAMINER		
ANDRUS, SCEA	LES, STARKE & S	SUCHFIELD, GEORGE A			
	NSIN AVENUE, SUI	ART UNIT	PAPER NUMBER		
MILWAUKEE, W	1 53202		3676		
			DATE MAILED: 06/15/200	Q	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 257 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 257 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/580,812	MINNICH ET AL.			
Notice of Allowability	Examiner	Art Unit			
	GEORGE SUCHFIELD	3676			
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	olication. If not included will be mailed in due course. THIS			
1. This communication is responsive to <u>3/3/08</u> .					
2. The allowed claim(s) is/are <u>1-34</u> .					
<ol> <li>Acknowledgment is made of a claim for foreign priority ur</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ol> * Certified copies not received:	be been received. be been received in Application No				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements			
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftspers		948) attached			
1)  hereto or 2)  to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t					
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT					
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	5. ☐ Notice of Informal P 6. ☐ Interview Summary	• •			
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7. ☐ Examiner's Amendr	ie			
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material  /GEORGE SUCHFIELD/	M M <u>L</u>	ent of Reasons for Allowance			
Primary Examiner, Art Unit 3676					

Page 2

Art Unit: 3676

1. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1-34 is that none of the references cited, taken either singly or in combination, teach or disclose a process for generating steam for downhole injection in a steam flooding process for oil recovery, as in the claimed combinations, including the recited steps (d) and (f)-(h) of claims 1. For example, the reference to Heims (2003/0127226) discloses an overall process for generating steam, including the use of an evaporator comprising a circulating concentrated brine stream. Such process, however, does not appear to generate the steam for injection directly in the circulating concentrated brine evaporator, nor does it heat the evaporator with a separate steam source comprising a watertube boiler, as specifically called for in claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE SUCHFIELD whose telephone number is (571)272-7036. The examiner can normally be reached on M-F (6:00 - 2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/580,812 Page 3

Art Unit: 3676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gs

June 9, 2009

/GEORGE SUCHFIELD/ Primary Examiner, Art Unit 3676